

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/005619 A1

(51) International Patent Classification:
A01K 67/027

C12N 5/06,

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/CA2004/000998

(22) International Filing Date: 8 July 2004 (08.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/485,430

8 July 2003 (08.07.2003) US

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): MCGILL UNIVERSITY [CA/CA]; 845 Sherbrooke Street West, Montreal, Quebec H3A 2K7 (CA).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): PETERSON, Alan, Clarke [CA/CA]; 464 Argyle Avenue, Westmount, Montreal, Quebec H3Y 3B4 (CA).

(74) Agents: WHITE, Stephanie, R. et al.; Osler, Hoskin & Harcourt LLP, Suite 1500, 50 O'Connor Street, Ottawa, Ontario K1P 6L2 (CA).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NON-INBRED EMBRYONIC STEM CELLS HAVING GOOD DEVELOPMENTAL POTENTIAL

(57) Abstract: The present invention provides non-inbred mouse embryonic stem (ES) cells comprising alleles derived from at least two different mouse strains and having high developmental potential. The ES cells optionally comprises a docking site for a transgene. Methods for production of the ES cells are also disclosed. This invention further provides chimeric and transgenic mice derived from the non-inbred ES cells and methods for deriving such mice.